5

10

15

4/6 404

HP Ref. No.: 10004917

ABSTRACT

A system and method for reducing image artifacts from a processed image are disclosed. An image enhancing system can be implemented with a memory device, an image region segmenter, an artifact detector, and a filter. The region segmenter may be configured to sub-divide an image frame. Each region may be processed by the artifact detector to identify when an image artifact is present in the region. The identified regions may be forwarded to the filter to smooth the harshness of the picture element discontinuities. The method for reducing image artifacts in a compressed and decompressed image can be broadly summarized by the following steps: receiving picture element data associated with at least one image frame; segmenting the at least one image frame into a plurality of regions in accordance with a first viewer selected imaging parameter; analyzing the plurality of segmented regions to identify regions that contain an image artifact in response to a second viewer selected imaging parameter; processing the identified regions with a filter such that at least one picture element data parameter is adjusted in response to both a third and a fourth viewer selected imaging parameters; and inserting adjusted picture element data values into the at least one image frame.